



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/699,099

10/30/2003

James H. VanGilder

200309961-1 (1964-55-3)

2664

22879

7590

04/02/2009

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

KANG, INSUN

ART UNIT

PAPER NUMBER

2193

NOTIFICATION DATE

DELIVERY MODE

04/02/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
jessica.l.fusek@hp.com

Office Action Summary	Application No. 10/699,099	Applicant(s) VANGILDER, JAMES H.	
	Examiner INSUN KANG	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/13/2006, 2/18/2004, and 10/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/13/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responding to application papers filed on 3/13/2006, 2/18/2004, and 10/30/2003.
2. Claims 1-26 are pending in the application.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Per claim 1, in line 11, "and/or" is interpreted as: "or."

Per claim 2: in line 14, "a subroutine graph" is interpreted as the subroutine graph.

Per claim 3, in line 27, "service independent...blocks" is interpreted as the service independent ...blocks. In line 30, "it" is interpreted as the begin subroutine...block. In the last line, "it" is interpreted as the return...block.

Per claim 4: in line 4, "a subroutine graph" is interpreted as the subroutine graph. In line 5, "a service graph" is interpreted as the service graph.

Per claims 5 and 6: "service ...blocks" is interpreted as the service...blocks.

Per claim 1, in line 11, "and/or" is interpreted as: "or." In line 12, "a service graph" is interpreted as "the service graph."

Per claims 7-8, 14, 17, 19, 22, and 24, "and/or" is interpreted as: "or."

Per claim 9: in line 9, "a subroutine graph" is interpreted as the subroutine graph.

Art Unit: 2193

Per claim 10, in line 22, “service independent...blocks” is interpreted as the service independent ...blocks. In line 25, “it” is interpreted as the begin subroutine...block. In the last line, “it” is interpreted as the return...block.

Per claim 11: In line 30, “a subroutine graph” is interpreted as the subroutine graph. In line 1 of page 21, “a service graph” is interpreted as the service graph.

Per claims 12, 13, 16: “service ...blocks” is interpreted as the service...blocks.

Per claim 15: in line 1, “a subroutine graph” is interpreted as the subroutine graph.

Per claim 18, “a service program” in line 1, is interpreted as the service program.

Per claim 20, in line 19, “a server system” is interpreted as the server system.

Per claims 22-23, it is not clear what the "system" means because the body of the claim does not support the preamble reciting “a system.” The system is directed to software alone comprising software components. Therefore, claims 22-23 reciting a system appear inaccurate lacking the necessary structural elements to be a physical system and support, even in its broadest reasonable sense, the preamble. Interpretation: a system is interpreted as software.

Per claim 21 and 25, they are rejected based on the dependency on claims 1 and 24.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 22-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Art Unit: 2193

Claims 22-23 are non-statutory because they are directed to a software system that does not have any physical structural elements. With no other structure in the independent claim to rely on, the alleged “system” of the claims turns out to be an abstract idea for being a computer program per se, and, thus, does not fit within the definition of the categories of patentable subject matter set forth in § 101. Therefore, the claims are non-statutory.

The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Specification

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The term, “computer-readable medium” in claims 14-16 is not defined in the specification. The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification with clear disclosure as to its import. The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. See MPEP § 2111.01 and §

Art Unit: 2193

2173.05(a), 608.01(o) [R-3], 608.01(i), 1302.01, and 37 CFR 1.75 and 1.58(a). The appropriate term that is supported in the disclosure needs to be used in the claims.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7,412,045. Although the conflicting claims are not identical, they are not patentably distinct from each other because: the following example is given:

Per claim 20, patent ‘045 recites developing a service program, a service graph from SIBs, a service script, executing service image etc in claim 1. Although the claims are not identical, the differences which are not patentable distinct from each other and would have been obvious to one of ordinary skill in the art of program development at the time of invention such as simply (i) omitting/adding steps or elements along with their

Art Unit: 2193

functions, and/or (ii) computer program implementation of the method, and/or (iv) implementing a system and medium for performing the method steps.

Claims 1-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7187380. Although the conflicting claims are not identical, they are not patentably distinct from each other because: the following example is given:

Per claim 24, patent '380 recites developing a service program, a service graph from SIBs, subroutine icons etc in claim 8. Although the claims are not identical, the differences which are not patentable distinct from each other and would have been obvious to one of ordinary skill in the art of program development at the time of invention such as simply (i) omitting/adding steps or elements along with their functions, and/or (ii) computer program implementation of the method, and/or (iv) implementing a system and medium for performing the method steps.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-17, 19, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by “GSDE for Windows User’s Guide” published on 12/2001 (hereafter “GSDE”).

Art Unit: 2193

Per claim 1:

GSDE discloses:

developing at least one service logic subroutine graph using a graphical interface (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas)

generating a subroutine icon representing each service logic subroutine graph (i.e. page 4-1, SIBs represented by icons) ; and inserting each subroutine icon into a service graph and connecting the icon to other subroutine icons and/or service independent building blocks in the service graph to form a service graph having an overall service logic process (i.e. “GSDE...to execute in the Flexible Service Logic Execution Environment...about the Service Independent Building Blocks (SIBs),” section V; page 4-7, SIBs section, placing a SIB on the Canvas; page 4-8, Linking SIBs).

Per claim 2:

GSDE further discloses:

a begin subroutine service independent building block indicating the start of the subroutine graph; at least one service independent building block connected to the begin subroutine graph; and at least one return subroutine service independent building block, a return subroutine service independent building block indicating an end of a corresponding service logic sub process in the subroutine graph and being connected to at least one service independent building block (i.e. page 4-10, The start SIB...The End SIB, page 4-11).

Per claim 3:

Art Unit: 2193

GSDE further discloses:

opening a new service graph canvas; placing service independent building blocks onto the canvas and interconnecting the blocks; placing the begin subroutine service independent building block on the canvas and interconnecting it to at least one service independent building block; and placing the return subroutine service independent building block on the canvas and interconnecting it to at least one service independent building block (i.e. page 4-7, SIBs section, placing a SIB on the Canvas; page 4-8, Linking SIBs).

Per claim 4:

GSDE further discloses:

input parameters that can be set by a service graph calling the subroutine graph; output parameters that can be returned to the service graph calling the subroutine graph; and event parameters that can be returned to the service graph calling the subroutine graph (i.e. page 4-6, graph properties and options. page 4-10, Input parameters area).

Per claim 5:

GSDE further discloses:

selecting a new subroutine tab; opening a subroutine canvas responsive to the selection of the new subroutine tab; and placing service independent building blocks onto the canvas and interconnecting the blocks as required to execute a service logic sub process (i.e. page 4-7, SIBs section, placing a SIB on the Canvas; page 4-8, Linking SIBs).

Art Unit: 2193

Per claim 6:

GSDE further discloses:

copying a group of service independent building blocks from the service graph and pasting them on the subroutine canvas (i.e. Figure 4-1, copy, past options in GSDE Canvas).

Per claim 7:

GSDE discloses:

A method of developing ...using a plurality of service independent building blocks, the method comprising: developing at least one service logic subroutine graph using a graphical interface; and inserting each subroutine graph into a service graph and connecting the subroutine graph to other subroutine graphs and/or service independent building blocks in the service graph to form a service graph having an overall service logic process (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-7, SIBs section, placing a SIB on the Canvas).

Per claim 8:

GSDE further discloses:

assigning an icon to each subroutine graph; inserting the icon into the service graph; and connecting the subroutine icon as required to other subroutines icons and/or service independent building blocks (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-8, Linking SIBs).

Per claims 9-13, they are other method versions of claims, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 2-6 above.

Per claims 14-16, they are the computer-readable medium versions of claims 1-3, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1-3 above.

Per claim 17:

GSDE further discloses: A method of executing a telecommunications service, comprising: receiving a service program for executing the telecommunications service (i.e. 4-13, Compaq Telecom), the service program having been generated by, developing at least one service logic subroutine graph using a graphical interface; generating a subroutine icon representing each service logic subroutine graph; and inserting each subroutine icon into a service graph and connecting the icon to other subroutine icons and/or service independent building blocks in the service graph to form a service graph having an overall service logic process (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-8, Linking SIBs); and running the service program to provide the telecommunications service (i.e. 4-13, Compaq Telecom; page 3-2, the service can be cut over (deployed) to the INS system).

Per claim 19:

Art Unit: 2193

GSDE further discloses: A method of executing a telecommunications service, comprising: under control of a client system, developing at least one service logic subroutine graph using a graphical interface; generating a subroutine icon representing each service logic subroutine graph; and inserting each subroutine icon into a service graph and connecting the icon to other subroutine icons and/or service independent building blocks in the service graph to form a service graph having an overall service logic process; transferring the service graph to a server system; and under control of the server system, running the service program to provide the telecommunications service. (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-8, Linking SIBs; 4-13, Compaq Telecom; page 3-2, the service can be cut over (deployed) to the INS system).

Per claim 22:

GSDE discloses: a graphical interface component operable in response to user input to develop at least one service logic subroutine graph using a graphical interface and to generate a subroutine icon representing each service logic subroutine graph, and operable to responsive to user input to insert each subroutine icon into a service graph and connect the icon to other subroutine icons and/or service independent building blocks in the service graph to form a service graph having an overall service logic process (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-8, Linking SIBs; 4-13, Compaq Telecom; page 3-2, the service can be cut over (deployed) to the INS system).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 18, 20, 21, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over “GSDE for Windows User’s Guide” published on 12/2001 (hereafter “GSDE”) in view of Iapalucci et al. (US 5,732,130) hereafter Iapalucci and QuickScript (“Vicorp Enhanced payment Solution, HP, 2002).

Per claim 18:

GSDE discloses service deployment to the INS system (page 3-2), however, it is not clearly recited that a service script is generated from the service graph and receiving this service script. However, such generation of service script is known, specifically, Iapalucci and QuickScript teach it was known in the pertinent art, at the time applicant's invention was made, to define and deploy the services (Iapalucci, col. 4 lines 5-31; QuickScript, page 3, right col., third par.). It would have been obvious for one having ordinary skill in the art to modify GSDE’s disclosed system to incorporate the teachings of Iapalucci and QuickScript. The modification would be obvious because one having ordinary skill in the art would be motivated to rapidly define and deploy the developed services.

Per claim 20:

GSDE discloses service deployment to the INS system (page 3-2), however, it is not clearly recited that a service script is generated from the service graph and receiving this

Art Unit: 2193

service script. However, such generation of service script is known, specifically, Iapalucci and QucikScript teach generating on the client system a service script from the service graph, and transferring the service script to the server system was known in the pertinent art, at the time applicant's invention was made, to define and deploy the services (Iapalucci, col. 4 lines 5-31; QucikScript, page 3, right col., third par.). It would have been obvious for one having ordinary skill in the art to modify GSDE's disclosed system to incorporate the teachings of Iapalucci and QuickScript. The modification would be obvious because one having ordinary skill in the art would be motivated to rapidly define and deploy the developed services.

Per claim 21:

GSDE further discloses: developing an executable application program on the server system, the executable application program being developed under control of the client system (i.e. page 3-2).

Per claim 23:

GSDE discloses an application build component operable to communicate with a server system to generate an application program on the server system and service deployment to the INS system (page 3-2), however, it is not clearly recited that a deployment component is coupled to the graphical interface component to receive a service script from the graphical interface component and operable to process the service script to generate files for deployment on the server system. However, Iapalucci and QucikScript teach it was known in the pertinent art, at the time applicant's invention was made, to define and deploy the services (Iapalucci, col. 4 lines 5-31; QucikScript, page 3, right

Art Unit: 2193

col., third par.). It would have been obvious for one having ordinary skill in the art to modify GSDE's disclosed system to incorporate the teachings of Iapalucci and QuickScript. The modification would be obvious because one having ordinary skill in the art would be motivated to rapidly define and deploy the developed services.

GSDE further discloses: a provisioning component operable to generate service data tables on the server system for use during execution of the service corresponding to the service script (i.e. page 5-1, Service Data Tables).

Per claim 24:

GSDE discloses service deployment to the INS system (page 3-2) and a service graph formed from a plurality of interconnected service independent building blocks and subroutine icon, each subroutine icon representing a subroutine graph (i.e. section 4, Service graphs, Figure 4-1. GSDE canvas; page 4-1, SIBs represented by icons; page 4-7, SIBs section, placing a SIB on the Canvas).

It is not clearly recited in GSDE that a build server is adapted to receive a service script corresponding to a telecommunications service, the service script having been generated from the service graph and the build server operable to compile the service script to generate a service image. However, such generation of service script is known, specifically, Iapalucci and QuickScript teach it was known in the pertinent art, at the time applicant's invention was made, to define and deploy the services (Iapalucci, col. 4 lines 5-31; QuickScript, page 3, right col., third par.). It would have been obvious for one having ordinary skill in the art to modify GSDE's disclosed system to incorporate the teachings of Iapalucci and QuickScript. The modification would be obvious because one

Art Unit: 2193

having ordinary skill in the art would be motivated to rapidly define and deploy the developed services.

GSDE further discloses: an open database server operable to generate service data tables required by the service image and store the tables in a table database; and an application component operable to execute the service image to provide the telecommunications service (i.e. page 5-1, Service Data Tables).

Per claim 25:

GSDE, Iapalucci, and QuickScript disclose:

- the server system comprises a service control point in an SS7 network (i.e. GSDE, page 4-13, TTNS; Iapalucci, col. 3 lines 55-67; QuickScript, page 3, "SS7").

Per claim 26:

GSDE further discloses: a service image database component including a plurality of service images that are executed by the application component (i.e. page 5-1, Service Data Tables).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent

Art Unit: 2193

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/
Examiner, Art Unit 2193